

SHCHUKINA, Ye. N.

Ancient zone of weathering in the Altai Territory and its significance in determining the age and origin of the relief. Mora vyvestr.
259-271 '56. (MLRA 9:8)

(Altai Territory--Paleogeography)
(Altai Territory--Geology, Stratigraphic)

Yu. A. LAVRUSHIN and Ye. N. SHCHUKINA

"Data on the Bauxite-Bearing Possibilities of Yenisey Region" p.462

Mineralogy and Origin of Bauxites, Moscow, Izd-vo AN SSSR (otd. geologo-geograf. nauk) 1958, 488pp.

This collection of articles by various authors on the mineralogy and geochemistry of bauxites appeared as a result of 1955 conf. on the origin of bauxite (Chairman, Acad. N. M. Stakhov)

SHCHUKINA, Yelena Nikolayevna; NIKIFOROVA, L.V., otv.red.; ROMANOVA, L.A.
red.izd-va; SABITOV, A., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.
red.

[Continental Tertiary sediments in the Central Urals] Kontinental'-
nye tretichnye otlozheniya Srednego Urala. Moskva, Gos.nauchn.-
tekhn.izd-vo lit-ry po gornomy delu, 1959. 189 p. (Akademija nauk
SSSR. Geologicheskii institut. Trudy, no.17) (MIRA 13:2)
(Ural Mountains--Sediments (Geology))

SHCHUKINA, Ye.N.

Regularities in the distribution of Quaternary sediments in the Altai
and their stratigraphy. Trudy GIN no.26:127-164 '60. (MIRA 13:12)
(Altai Mountains--Geology, Stratigraphic)

S/229/63/000/002/002
E081/E141

AUTHORS: Shuygin, F.P., Engineer, and
Shchukina, Ye.N., Candidate of Technical Sciences

TITLE: Fatigue characteristics of aluminium alloys used in
ship construction

PERIODICAL: Sudostroyeniye, no.2, 1963, 47-51

TEXT: Fatigue tests up to about 10⁷ cycles on the aluminium
alloys AMg-5B, AMg-61 and Al-Zn-Mg, are described and discussed.
The results are compared with those of previous workers to assess
the effect of various types of welded joint on the fatigue strength.
The effect of exposure to sea water on the fatigue strength is also
measured. Conclusions: the alloy Al-Zn-Mg has most favorable
fatigue properties, both welded and unwelded; the best type of
angle welded construction investigated was a double sided
continuous seam; welded construction in aluminium alloy is
particularly sensitive to stress concentration; coatings which
protect aluminium in ships against sea water also prevent any
adverse effects on fatigue properties.
There are 6 figures and 2 tables.

Card 1/1

SHUYGIN, F.P., inzh.; SHCHUKINA, Ye.N., kand.tekhn.nauk

Fatigue characteristics of aluminum alloys used in shipbuilding.
Sudostroenie 29 no.2:47-51 F '63. (MIRA 16:2)
(Aluminum alloys--Fatigue) (Shipbuilding materials)

SHIMANSKIY, Yulian Aleksandrovich, akademik (1883-1962); PERSHIN, V.I., red.;
ARSYUTKIN, A.A., nauchn. red.; DOROFEEV, S.K.,
nauchn. red.; SBOROVSKIY, A.K., nauchn. red.; SHCHUKINA,
Ye.N., nauchn. red.; KLIORINA, T.A., red.; CHISTYAKOVA,
R.K., tekhn. red.; KOROVENKO, Yu.N., tekhn.red.

[Dynamic calculation of ship structures] Dinamicheskii ras-
chet sudovykh konstruktsii. Pod obshchei red. V.I.Pershina.
Leningrad, Sudpromgiz, 1963. 444 p. (MIRA 17:1)

BERZON, Inna Solomonovna; BOKANENKO, Lev Ivanovich; ISAYEV, Vasiliy
Semonovich; SHCHUKINA, Ye.P., red.; BRUZGULS, V.V., tekhn.red.

[Seismic studies on the Tuyuksu Glacier] Seismicheskie
issledovaniia na lednike Tuyuksu. Moskva, Izd-vo Akad.nauk
SSSR, 1959. 66 p. (Akademia nauk SSSR. Mezhdunarodnyi
komitet po provedeniu Mezhdunarodnogo geofizicheskogo goda
seismicheskie issledovaniia, no.2). (MIRA 13:2)
(Tuyuksu Glacier--Seismology--Observations)

PREOBRAZHENSKIY, V.S.; AVSYUK, G.A., prof., doktor geograf.nauk, otv.red.;
SHCHUKINA, Ye.P., red.; POLENOVA, T.P., tekhn.red.

[Kodar glacier area (Transbaikalia)] Kodarskii lednikovyj raion
(Zabaikal'e). Moskva, Izd-vo Akad.nauk SSSR, 1960. 71 p.
(IX razdel programmy MGG (gliatsiologija), no.4).

(MIRA 13:12)

(Kodar Range--Glaciological research)

KUSHNEREVSKIY, Yu.V., otv.red.; MIRKOTAN, S.F., kand.fiz.-matem.nauk,
otv.red.; SHCHUKINA, Ya.P., red.; GUS'KOVA, O.M., tekhn.red.

[Investigation of ionospheric irregularities; collection of
articles] Issledovaniia neodnorodnosti v ionosfere; sbornik
statei. V razdel programmy MGG (ionosfera). Moskva. No.4.
1960. 96 p. (MIRA 13:12)

1. Akademiya nauk SSSR. Mezhdunarodnyy komitet po prove-
deniyu Mezhdunarodnogo geofizicheskogo goda.
(Ionospheric research)

FEDOROV, Ye.P., doktor fiz.-matem.nauk, otv.red.; SHCHUKINA, Ye.P., red.;
RYLINA, Yu.V., tekhn.red.

[Preliminary results of studies on latitudinal variations and
polar motions of the earth; collection of articles] Predvari-
tel'nye rezul'taty issledovanii kolebanii shirok i dvizhenii
poliusov zemli; sbornik statei. VIII razdel programmy MGG
(shiroty i dolgoty). Moskva. No.1. 1960. 97 p.

(MIRA 13:12)

1. Akademiya nauk SSSR. Mezhdurevedomstvennyy komitet po pro-
vedeniyu Mezhdunarodnogo geofizicheskogo goda.
(Latitude)

SYSOYEV, N.N., otv.red.; SHCHUKINA, Ye.P., red.; MARKOVICH, S.G.,
tekhn.red.

[Oceanological research; collection of articles] Okeanologicheskie issledovaniia; sbornik statei. X razdel programmy MGG (okeanologii). Moskva. No.2. 1960. 125 p.

(MIRA 13:12)

1. Akademiya nauk SSSR. Mezhdunarovodnyy komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda.
(Oceanographic research)

KALASHNIKOV, A.G., doktor fiziko-matemat.nauk, otv.red.; TROITSKAYA,
V.A., kand.fiziko-matem.nauk, otv.red.; SHCHUKINA, Ye.P.,
red.; MAKUNI, Ye.V., tekhn.red.

[Short-period pulsations of the earth's electromagnetic field.
Section III of the IGY program (geomagnetism)] Korotkopери-
dicheskie kolebaniia elektromagnitnogo polia Zemli; sbornik
statei. III razdel programmy MGG (geomagnetism). Moskva.
No.3. 1961. 114 p. (MIRA 14:2)

1. Akademiya nauk SSSR. Mezhdunarovenny komitet po pro-
vedeniyu Mezhdunarodnogo geofizicheskogo goda.
(Magnetism, Terrestrial)

KRASOVSKIY, V.I., doktor fiziko-matem. nauk, otv. red.; SHCHUKINA, Ye.P.,
red.; TIKHOMIROVA, S.G., tekhn. red.

[Spectral, electrophotometric, and radar investigations of
auroras and the airglow; collection of articles] Spektral'-
nye, elektrofotometricheskie i radiolokatsionnye issledova-
niia poliarneykh sianii i svecheniia nochnogo neba; sbornik
statei. IV razdel programmy MGG (poliarneye sianii i svechenie
nochnogo neba). Moskva, Izd-vo Akad. nauk SSSR. No.6. 1961. 41 p.
(MIRA 14:12)

1. Akademiya nauk SSSR. Mezhdunovomstvennyy komitet po provede-
niyu Mezhdunarodnogo geofizicheskogo goda.
(Auroras) (Night sky)

KOTLYAKOV, Vladimir Mikhaylovich; AVSYUK, G.A., otv. red.; SHCHUKINA, Ye.P., red.; VOLKOVA, V.Ye., tekhn. red.

[Collection of articles] Sbornik statei. Moskva, Izd-vo Akad. nauk SSSR. No.7. [The snow cover of Antarctica and its role in the contemporary glaciation of the continent] Snezhnyi pokrov Antarktidy i ego rol' v sovremenном oledenenii materika. 1961. (MIRA 15:7) 245 p.

1. Akademiya nauk SSSR. Mezhdunarovenny komitet po provedeniyu Mezhdunarodnogo geofizicheskogo goda. IX razdel programmy MGG. Glaciologiya. 2. Chlen-korrespondent Akademii nauk SSSR for Avsyuk).

(Antarctic regions—Snow)

YELSHIN, K., inzh. (Ufa); BRONSHTEYN, I., inzh. (Ufa); SHESTAKOV, V., slesar' (Khar'kov); D'YACHENKO, B., slesar' (Khar'kov); SHCHUKLIN, F., inzh.-tekhnolog (Izhevsk); KOCHMOLA, G., inzh.; KHRAMKOV, V., inzh.-konstruktor (Gus'-Khrustal'nyy); GREYSMAN, A. (Kaltan, Kemerovskaya obl.); SUDNIKOV, V.I. (Verkhniy Ufaley)

Advertising board. Izobr.i rats. no.9:34 S '62. (MIRA 16:3)

1. Darnitskiy vagonoremontryy zavod (for Kochmola).
(Technological innovations)

S/033/63/040/002/013/021
E001/E120

AUTHORS: Krotikov V.D., and Shchuko, O.B.

TITLE: On the thermal behavior of the Moon's surface layer
during lunations

PERIODICAL: Astronomicheskiy zhurnal, v.40, no.2, 1963, 297-303

TEXT: The problem of the Moon's surface layer thermal behavior is reduced to calculating the heating of the surface of a semi-infinite solid body which is being warmed periodically by the Sun and is radiating according to the Stephan-Boltzmann law. The present article describes the results of investigating this problem by means of a BESM-2 (BESM-2) electronic computer. As studies of the Moon's radio emission have shown, the single-layer model of the lunar surface agrees well with experimental data. Only a uniform structure of this surface layer is considered. The steady-state solution of the heat conductivity equation

$$\frac{\partial T}{\partial t} - a \frac{\partial^2 T}{\partial x^2} = 0$$

with corresponding initial and boundary conditions was found by
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On the thermal behavior of the ...

S/033/63/040/002/013/021
E001/E120

the method of finite differences. The values of the surface temperature and depth distribution of temperature were calculated, assuming the solar constant A_0 to be $0.033 \text{ cal/cm}^2 \cdot \text{sec}$, for different values of parameter $\gamma = (K\varrho c)^{-1/2}$

where K is thermal conductivity coefficient, ϱ is density, and c is thermal capacity. The results of calculations are tabulated and presented graphically. The temperatures of the subsolar point T_m , mean nightly temperature T_n , constant component T_0 and amplitude of the first harmonic T_1 , as functions of parameter γ are presented in the curves of Fig.3. The function of temperature distribution over the lunar surface is described by the formula:

$$T_{\text{surf}}(\varphi, \psi, t) = T_0 \cos^{1/5} \psi + T_1 \cos^{1/3} \psi \cos(\Omega t - \varphi - \varphi_1) +$$

$$+ T_2 \cos^{0.27} \psi \cos(2\Omega t - 2\varphi + \varphi_2) -$$

$$- T_3 \cos^{7/16} \psi \cos(3\Omega t - 3\varphi - \varphi_3) - \dots$$

where T_n and φ_n are values of amplitudes and phases of harmonics for the center of the lunar disk; Ω is lunation

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On the thermal behavior of the ...

S/033/63/040/002/013/021
E001/E120

frequency; ϕ is longitude and ψ is latitude. The results of calculations were compared with experimental data taken from the Sinton thermal map of the Moon (Lowell. Obs. Bull., v.5, no.1, 1961) for infrared wavelengths, and the agreement between calculated and experimental data was found satisfactory. V.S. Troitskiy is thanked for the supervision of the present study. There are 5 figures and 1 table.

ASSOCIATION: Radiofizicheskiy institut Gor'kovskogo gos.
universiteta im. N.I. Lobachevskogo
(Radiophysical Institute of the Gor'kiy State
University imeni N.I. Lobachevskiy).

SUBMITTED: March 13, 1962

Card 3/6
3

L 34470-65 FBD/EWT(1)/EWG(v)/EEC-4/EEC(t) Po-4/Pe-5/Pae-2/Pi-4 GW/WS-4

ACCESSION NR: AP5006010

S/0033/65/042/001/0145/0147

AUTHOR: Krotikov, V. D.; Shchuko, O. B.

TITLE: The averaging effect of an antenna directional pattern in measuring lunar
radio emission

9M

SOURCE: Astronomicheskiy zhurnal, v. 42, no. 1, 1965, 145-147

TOPIC TAGS: lunar temperature, antenna directional pattern, lunar radio emission

ABSTRACT: V. S. Troitskiy's formula for determining the effective lunar temperature at various wavelengths (Astron. zh., [v.] 31, 79, 1954) is modified to take into account the averaging effect of the antenna directional pattern. It is assumed 1) that the antenna directional pattern is a body of revolution, 2) that the axis of the diagram passes through the center of the Moon, and 3) that side lobes are absent. The dependence of the ratio of averaging coefficients on pattern bandwidth σ is calculated for various wavelengths in the 0.1—10-cm band and for $\epsilon = 3, 1.5$, and 1.2 . At $\sigma > 40'$, the averaging effect can be neglected. On the basis of the experimental data, the characteristic parameter δ_1 can be determined more precisely. Orig. art. has: 1 figure, 1 table, and 2 formulas. [JR]

Card 1/2

L 34470-65

ACCESSION NR: AP5006010

ASSOCIATION: Gor'kovskiy nauchno-issledovatel'skiy radiofizicheskiy institut
(Gorky Scientific Research Institute of Radio Physics)

SUBMITTED: 03Feb64

ENCL: 00

SUB CODE: EC/A

NO REF SOV: 002

OTHER: 000

ATD PRESS: 3213

Card 2/2

KROVILIN, V.D.: SHARIKO, O.B.

Allowance for the averaging effect of the directional diagram of
the antenna in lunar radio emission measurements. Astron. zhur.
42 no.1:115-147 Ja-F '65. (MIRA 18:2)

I. Gor'kovskiy nauchno-issledovatel'skiy radiofizicheskiy institut.

L 10311-63 BDS
ACCESSION NR: AP300888

S/0179/63/000/002/0131/0132

AUTHOR: Shchuko, S. D. (Gor'kiy)

46

TITLE: A dynamic model of a restrained clockwork without start-and-stop motion of the escape wheel.

SOURCE: AN SSSR. Izv. Otd. tekhn. nauk. Mekhanika i mashinostroyeniye, no. 2, 1963, 131-132

TOPIC TAGS: clockwork, non-stop escape wheel, non-stop escapement.

ABSTRACT: This theoretical paper examines the dynamic model of a restrained clockwork motion without any start-stop motion of the escape wheel on a simplified model with 2 degrees of freedom. This study constitutes a generalization of the model previously investigated by N. N. Bautin (Inzheernyy sbornik, v. 16, 1953; Adad. nauk SSSR., Izv., Otd. tekhn. nauk, no. 10, 1955). The escape wheel is represented by an infinite straight-sided toothed rack that is caused to move by a constant moment P. All geometric and impulse-transfer characteristics are assumed to be symmetrical with respect to the equilibrium positions of the balance unit. In the study of the period and amplitude of the periodic solution,

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L 10311-63

ACCESSION NR: AP3000888

O

the model investigated here (Fig.1) has 2 degrees of freedom, and its phase space is 4-dimensional. However, inasmuch as the escape wheel and the balance unit are kinematically coupled during the impulse transfer, the post-impulse coordinates and velocities of the balance unit and the escape wheel coincide. The investigation of the phase space of the system can, therefore, be reduced to the transformation of the semi-straight-line of the post-impulse states into itself. Analytical expressions are derived for the oscillatory period and its stability. There are 9 numbered equations and 1 figure.

ASSOCIATION: none

SUBMITTED: 27Dec62 DATE ACQ: 12Jun63 ENCL: 01

SUB CODE: MD,CG NR REF SOV: 002 OTHER: 000

Card 2/32

L 53921-65

ACCESSION NR: AP5017359

UR/0239/64/050/011/1329/1334

AUTHOR: Vinnikov, Ya. A.; Zhinkin, I. L.; Shchukolyukov, S. A.

9

B

TITLE: Activity of enzymes of the succinoxidase system in mitochondria of neurons of the auditory and visual cortex and of the cerebellum under conditions of relative rest and on adequate stimulation

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 50, no. 11, 1964, 1329-1334

TOPIC TAGS: experiment animal, brain, light biologic effect, acoustic biologic effect, enzyme, neurology

Abstract: A histochemical study was carried out of the enzymes of the succinoxidase system of mitochondria of neurons of the auditory and visual cortex and of the cerebellum, using sections of the brain and cerebellum of guinea pigs that had been subjected to the action of sound of 95 decibels at a frequency of 300 or 1,500 cycles for 15-30 min or 1-6 hrs. The results were compared with those obtained on brain sections of guinea pigs that had not been subjected to a sound stimulus. In another series of experiments, the brain sections of guinea pigs subjected to the action of bright intermittent light for 30 min were studied. Guinea pigs adapted to darkness were used as controls. Significant changes in the enzyme activity of mitochondria

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L 53921-65

ACCESSION NR: AP5017359

of neurons of the cortex were found on application of the stimuli, but no changes produced by the stimuli were detected in mitochondria of neurons of the cerebellum. Orig. art. has 6 figures.

ASSOCIATION: Institut Evolyutsionnoy fiziologii im. I. M. Sechenova AN SSSR,
Leningrad (Institute of Evolutionary Physiology, AN SSSR)

SUBMITTED: 05May63

ENCL: 00

SUB CODE: LS

NO REF Sov: 011

OTHER: 013

JPRS

Jac
Card 2/2

B.J.R.
Chemistry - Organic

6294* Investigation of the Isomerization and Polymerization of Dimethylvinylcarbinol Depending on pH of the Reagent. (In Russian.) A. I. Lebedeva and L. L. Shechukov

skaz. *Zhurnal Osnovnoi Khimii*, v. 21(85), June 1951, p. 1132

1139
Data are tabulated and charted

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

4
(2) Chem.
Synthesis and properties of allylsilanes: 1-naphthyltri-
allylsilane, cyclohexyltritylsilane, butyltriallylsilane, and
tributylallylsilane. A. D. Petrov and L. L. Shchuk-
kovskaya. Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.
1952, 537-8 (Engl. translation). See C.A. 47, 3792g.
H. L. H...
M.H.

U. ✓Chemistry - Organosilicon Compounds

21 Sep 52

"The Synthesis and Properties of Symmetrical Acetylenic Silanes," A.S.Petrov, Corr
Mem Acad Sci Ukr., and L. S. Chechukovskaya, Inst Org Chem, Acad Sci USSR

JAN JINR, Vol 86, No 3, pp 551-553

$(\text{CH}_3)_3\text{SiC}\equiv\text{Si}(\text{CH}_3)_3$ (I), $(\text{C}_2\text{H}_5)_3\text{SiC}\equiv\text{Si}(\text{C}_2\text{H}_5)_3$ (II), and $(n\text{-C}_4\text{H}_9)_3\text{SiC}\equiv\text{Si}(n\text{-C}_4\text{H}_9)_3$ (III) were synthesized from LiC_2 , $\text{C}_2\text{H}_5\text{Ir}$, and acetylene using the appropriate compds of the following: $(\text{CH}_3)_3\text{SiCl}$, $(\text{C}_2\text{H}_5)_3\text{SiBr}$, and $(n\text{-C}_4\text{H}_9)_3\text{SiCl}$ for reaction with the symmetrical complex formed initially. The hydrogenation of II was performed over Raney nickel and in an autoclave under heat and pressure.

PA 24717

SHCHUKOVSKAYA, L. L.

✓ Synthesis and properties of organosilicon esters of mono-
and dibasic acids. D. N. Andreev and L. L. Shchukovskaya.
Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci. 1953,
121-1 (Engl. translation).—See C.A. 48, 3244i. H. L. H.

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Organic Chemistry

Synthesis and properties of organosilicon esters of mono-
and dibasic acids. D. N. Andreev and L. L. Shchukovskaya.
Izdat. Akad. Nauk S.S.R., Otdelenie Khimicheskogo Nau-

konstruktsii, p. 9.—Heating 20 g. Et₂SiCl with 52 g. PrCO₂H 35
hrs. gave 82% PrCO₂SiEt₂; a 90% yield resulted from 37 g.
Et₂SiCl and 93 g. PrCO₂Na in boiling xylene in 20 hrs.;
the product bp 85-7°, n_D^{20} 1.4250, d_4^{20} 0.8550. Similarly,
Et₂SiCl and iso-BuCO₂H in 40 hrs. gave 26% iso-BuCO₂
SiEt₂, bp 82.5-8.5°, n_D^{20} 1.4268. Heating 19 g. Et₂SiCl
with 16 g. enanthic acid 40 hrs. gave 9 g. Et₂SiOH, 3 g.

(Et₂SiO₂O, and 2 g. $CH_3CO_2SiEt_2$, bp 127.5-9.0°, n_D^{20} 1.4303.
Heating 50 g. Et₂SiCl with 12 g. (CH_3CO_2H)₂ 107 hrs.,
filtration of the unreacted acid, and distn. gave some Et₂
SiOH and (CH_3CO_2H)₂ and a small amt. of ($CH_3CO_2SiEt_2$)₂,
bp 172.5°, n_D^{20} 1.4450, d_4^{20} 0.9318; the low yield was
caused by the necessity of an alkali wash before distn.
Similarly adipic acid gave, in 60 hrs., 28% bis(trimethylsilyl)
adipate, bp 158-4°, n_D^{20} 1.4276, d_4^{20} 0.9389; bis(triethylsilyl)
adipate; obtained similarly in unstated yield, bp 221-2°,
 n_D^{20} 1.4476, d_4^{20} 0.9496. Me₂SiCl and azelaic acid in 92 hrs.
gave unstated yield of bis(trimethylsilyl) azelate, bp 180-1°,
 n_D^{20} 1.4310; similarly was obtained 54% bis(tributylsilyl)-
azelate, bp 240-1°, n_D^{20} 1.4500, d_4^{20} 0.9438. All the esters are
readily hydrolyzed, the esters of dicarboxylic acids being
especially sensitive. The Et derivs. are more stable than
Me analogs.

G. M. Kosolapoff

SHCHUKOVSKAYA, L.L.

J. Synthesis and properties of mono- and disubstituted silanes and silycetylenic hydrocarbons. A. D. Petrov, L. L. Shchukovskaya, and Yu. P. Egorov (N. D. Zelinskii Inst. Org. Chem., Acad. Sci. U.S.S.R. Moscow). Doklady Akad. Nauk S.S.R. 93, 283-6 (1963); cf. C.A. 47, 122285.—MeSiCH (13.5 g.) treated with EtMgBr (from 43 g. EtBr) with ice cooling, kept 4-8 hrs. at room temp., 44 g. Et₂NBr added, and the mixt. stirred 5 hrs. and refluxed 4 hrs. gave 79% Et₂SiC/CH (I), b. 109.5-70.5°, $\nu_{\text{C}}^{\text{K}}$ 1.4488, d_4 0.8020, Raman spectrum (cm.⁻¹) 310(3), 368(4), 402(4), 498(1), 548(1), 608(6), 676(1), 712(2), 740(3), 774(4), 1008(3), 1025(3), 1236(4), 1380(5), 1418(4), 1466(3), 2188(10), 2322(2), 2857(1), 2885(8), 2891(4), 2920(8), and 3062(5). Hydrogenation over Pd gave Et₂SiPr, b. 170°, $\nu_{\text{C}}^{\text{K}}$ 1.4308, d_4 0.7725. I (8 g.) and 1.6 g. Na heated in a sealed tube 18-18 hrs. at 170-220° gave some 2 g. higher-boiling product, b₄ 162-8°, $\nu_{\text{C}}^{\text{K}}$ 1.4718, d_4 0.8443, possibly the cyclic dimer. Similarly were prep'd.: Me₂SiC/CH, b₄ 99-100°, $\nu_{\text{C}}^{\text{K}}$ 1.4091, d_4 0.7581; Me₃SiC/CH, b₄ 87.5°, $\nu_{\text{C}}^{\text{K}}$ 1.5284, d_4 0.8961, Raman spectrum 200(4), 218(3), 226(3), 300(1), 342(2), 394(4), 630(5), 560(1), 588(6), 623(4), 648(5), 674(1), 690(3), 748(5), 802(3), 941(3), 998(2), 1023(4), 1117(2), 1154(4), 1178(7),

1248(10), 1416(2), 1250(1), 1443(2), 1489(4), 1568(10), 2160(20), 2901(8), 2950(6), and 3060(10); Et₂SiC/CPA, b₄ 132-3.5°, $\nu_{\text{C}}^{\text{K}}$ 1.5259, d_4 0.8984, Raman spectrum 297(2), 408(2), 423(3), 459(1), 537(5), 568(1), 623(5), 754(3), 828(5), 857(1), 970(3), 998(20), 1008(2), 1023(2), 1117(4), 1154(4), 1175(7), 1217(10), 1234(3), 1460(4), 1415(3), 1489(1), 1506(16), 2159(20), 2882(5), 2910(8), 2000(4) and 3060(15). The acetylene link thus shows a Raman frequency ranging from 2180 to 2160 (in conjugated Ph derivs.). The cyclic dimer mentioned above probably has a cyclobutane ring since it lacks the 2999 and 3076 lines, which are characteristic of a :CH₂ group. Treatment of Me₃SiI (from 150 g. MeI) with CH₄ at 3 atm. initially, then heating in an autoclave to 45°, treatment of the product with 45 g. Et₂SiCl and 5 g. HgCl₂ in Et₂O and again heating under C₂H₂ pressure to 80-80° 5-6 hrs., gave 10% Et₂SiC/CH, b₄ 59-61°, $\nu_{\text{C}}^{\text{K}}$ 1.4347, d_4 0.7918. Me₂SiCl failed to react with Me₂C(OH)C₂H (II). To the Grignard complex from 17 g. II, 44 g. EtBr, and 10 g. Mg was added 44 g. Me₂SiCl, and the mixt. refluxed 6 hrs., evapd., heated 4 hrs. on a steam bath, and treated with H₂O, to yield 22 g. Me₂C(OSiMe₃)C₂H, b₄ 94-6°, m. 42-2.5°. Similarly was prep'd. Me₂C(OSiEt₃)C₂H, b₄ 121.8°, $\nu_{\text{C}}^{\text{K}}$ 1.4557, d_4 0.8638. G. M. Kacolapoff

SHCHUKOVSKAYA, L. L.

"Synthesis and Reactions of Unsaturated Silicon Hydrocarbons."
Cand Chem Sci, Leningrad State U, Leningrad, 1954. (RZhKhim, No 22,
Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

SHCHUKOVSKAYA, L.L.

Behavior toward chemical reagents of the silicon-carbon bond in α -alkyaryl- and β -alkenylsilanes. A. D. Petrov and L. L. Shchukovskaya. *Zhur. Obshchey Khim.* 25, 1128-30 (1955). The reaction of R_2SiX with acetylenic Grignard reagents involves the etherate of the latter; the silicon reagent reacts with the Et_2O , so that an excess of $RMgX$ is necessary to complete the reaction, or the reaction must be run without Et_2O . The Si-C link in acetylenic silanes is cleaved under mild hydration conditions, but is quite stable to bromination, being able to add 2 or 4 Br atoms. In contrast to $(CMgX)_2$ and $HCl:CNa$, $ArCl:CMgX$ react readily with $SiCl_4$. Allylic silanes undergo cleavage under conditions of bromination or action of $PhLi$. To $(CMgBr)_2$ from 20 g. Mg, 94 g. Et_2Br , and C_6H_6 in Et_2O was added 48 g. Bu_4SiCl ; the mixture refluxed 6 hrs., freed of Et_2O and heated 26 hrs. at 140-60° gave, after aq. treatment, 32% Bu_4SiOEt , b_p 126-8°, n_D^{20} 1.4368, d_2° 0.8217, and 52% $(Bu_4Si)_2O$, b_p 134-6°, n_D^{20} 1.4470, d_2° 0.8332. Similar reaction of 60 g. Mg, 281 g. Et_2Br , C_6H_6 , and 67 g. Bu_4SiCl in Et_2O gave 43% Bu_4SiOEt and 13% $(Bu_4SiCl)_2$, b_p 215-19°, n_D^{20} 1.4598, d_2° 0.8339. Similar reaction with 50 g. Mg, 234 g. Et_2Br , C_6H_6 , 44 g. Bu_4SiF , and 2 g. Cu_2Cl_2 , the reaction being completed by 8.5 hrs. at 165-70°, gave 48.7% Bu_4SiOEt and 22.3% $(Bu_4SiCl)_2$, b_p 216-18°, n_D^{20} 1.4597; a modification in which after the prepn. of $(CMgBr)_2$ the Et_2O was decanted and replaced with petr. ether, gave 40.6% Bu_4SiOEt and 33% $(Bu_4SiCl)_2$, b_p 217-19°, d_2° 0.8276, n_D^{20} 1.4595. To $EtMgBr$ from 15 g. Mg and 100 g. Et_2Br in dry C_6H_6 (cf. Andrianov, *C.A.* 41, 701c) was added C_6H_6 over 12 hrs. yielding a purple

layer, which was then treated with 39 g. Bu_4SiF as above, yielding some Bu_4SiOEt and 15-18% $(Bu_4SiCl)_2$, b_p 210-12°. Similar reaction of 22.5 g. Mg, 100 g. Et_2Br , C_6H_6 , and 40 g. $(C_6H_5)_2SiCl$ with 2 g. Cu_2Cl_2 gave 51% $(C_6H_5)_2SiOEt$, b_p 101-2°, n_D^{20} 1.4442, d_2° 0.8272 and 25% $(C_6H_5)_2Si_2O$, b_p 277-9°, n_D^{20} 1.4574, d_2° 0.8385; a reaction of 7.5 g. Mg, 37 g. Et_2Br , C_6H_6 , and 30.5 g. $(C_6H_5)_2SiF$ gave 33% $(C_6H_5)_2SiOEt$ and 46% $(R_3Si)O$. When $(CMgBr)_2$ was prepnd. from 30 g. Mg, 140 g. Et_2Br , and C_6H_6 in Et_2O , and the solvent was decanted and replaced with petr. ether, and the mixt. was treated with 2 g. Cu_2Cl_2 and 31.5 g. $(C_6H_5)_2SiF$, the usual treatment gave 35% $(C_6H_5)_2SiOEt$ and 30.7% $(C_6H_5)_2SiCl_2$, b_p 303-5°, n_D^{20} 1.4603, d_2° 0.8354. Reaction of 11 g. Mg, 53 g. Et_2Br , C_6H_6 in Et_2O with 40 g. Ph_3SiF , with distn. of the solvent and heating the residue 9 hrs. to 100° gave 13% $(Ph_3SiCl)_2$, m. 155° (from petr. ether). Reaction of 12 g. Mg, 61 g. $CH_3CH_2CH_2Br$, and 36 g. Ph_3SiF in Et_2O gave 74% $Ph_3SiCH_2CH_2CH_3$, m. 91-2° (from $EtOH$); this (4.6 g.) added to $PhLi$ from 0.5 g. Li and 5 g. $PhBr$ and the mixt. after 23 hrs. at room temp. and 4 hrs. on steam bath gave an unstd. amt. of Ph_3SiOH , m. 149-60°. Addn. of 21 g. Br in CCl_4 to 17.95 g. $Et_2SiCl:CMe$ in 4 hrs. gave 12 g.

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Et₂Si(CBr)CBr₂Me, b.p. 148.5-8.5°, n_D²⁰ 1.5258, d₄₀ 1.4178;
further bromination with 10.5 g. Br at 40-50° gave 15 g.
Et₂Si(CBr)₂CBr₂Me, b.p. 164-5°, n_D²⁰ 1.5595, d₄₀ 1.6766.
Heating 10.4 g. Me₂SiC₂CPh with 1 g. HgSO₄, 60 ml. 80%
MeOH, and 2 drops H₂SO₄, 4.5 hrs. at 60° gave 5.5 g. AcPh.
Et₂SiC₂CPh also gave AcPh under these conditions. Reaction of 5 g. Mg, 22 g. EtBr, 7 l. MeC₂CH, and 28 g.
Ph₂SiP in Et₂O gave 55% Ph₂SiC₂CMe, m.p. 113-14° (from EtOH).
Reaction of 5 g. Mg, 30 g. EtBr, 22.4 g. PhC₂CH, and 50 g. SiCl₄, completed by 4 hrs. on a steam bath gave 22.5% Cl₂SiC₂CPh, b.p. 132-5°, n_D²⁰ 1.5537, d₄₀ 1.2871.
Also in J. Gen. Chem. U.S.S.R. 25, 1083-8 (1955) (Engl. translation).

G. M. Kosolapoff

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SHCHUKOVSKAYA, L. L.

✓ Addition of polyhalosilanes and alkylhydrosilanes to compounds which contain a triple bond. L. L. Shchukovskaya, A. D. Petrov, and Yu. F. Egorov (Inst. Sinteticheskoi Khim., Leningrad). Zhur. Obshch. Khim. 26, 3333-41 (1958); cf. C.A. 51, 12225h. Heating 1.9 g. $\text{Me}_2\text{SiCl}(\text{CMe})$ with 60 g. SiHCl_3 and 2.8 g. Bz_2O in an autoclave 24 hrs. at 100° gave $\text{MeCH}(\text{C}(\text{SiMe}_2)\text{SiCl}_3)$, $\nu_{\text{as}}^{\text{KBr}}$ 1,177.5-19°, $\nu_{\text{cm}}^{\text{KBr}}$ 1,4783, $\delta_{\text{as}}^{\text{KBr}}$ 1,1426, and a putative 1:2 adduct, $\nu_{\text{as}}^{\text{KBr}}$ 167-70°, 1,5041, 1,3630. Each of these was treated with excess McMgBr , yielding un-stated amounts of $\text{MeCH}(\text{C}(\text{SiMe}_2)_2)$, $\nu_{\text{as}}^{\text{KBr}}$ 172-3°, 1,4518, 0,8026; Raman spectrum (cm.⁻¹), 162(4), 194(4), 230(4), 270(5), 310(1), 396(6), 502(3), 618(3), 645(10), 688(5), 762(0), 845(3), 1040(1), 1117(2), 1252(3), 1267(2), 1286(0), 1364(4), 1416(3), 1447(4), 1570(4), 2850(3), 2863(3), 2910(10), 2958(8), 2970(4). Heating 18.5 g. $\text{Me}_2\text{SiCl}(\text{CPh})$ with 20 g. MeSiHCl_3 and 0.1 g. Pt-C catalyst 26 hrs. at 200-20° gave 19 g. $\text{PhCH}(\text{C}(\text{SiMe}_2)\text{SiMeCl}_2)$, $\nu_{\text{as}}^{\text{KBr}}$ 144°, $\nu_{\text{cm}}^{\text{KBr}}$ 1,5204, $\delta_{\text{as}}^{\text{KBr}}$ 1,0693, which with McMgBr gave $\text{PhCH}(\text{C}(\text{SiMe}_2)_2)$, $\nu_{\text{as}}^{\text{KBr}}$ 146-7°, $\nu_{\text{cm}}^{\text{KBr}}$ 1,5020, $\delta_{\text{as}}^{\text{KBr}}$ 0,8775, Raman spectrum, 168(2), 191(7), 235(4), 242(6), 318(4), 343(5), 450(6), 570(3), 605(3), 620(10), 695(5), 749(3), 771(1), 845(4), 900(4), 939(3), 1000(10), 1030(6), 1078(0), 1124(1), 1153(4), 1174(7), 1218(6), 1250(4), 1312(7), 1415(4), 1447(3), 1553(6), 1576(4), 1603(10), 2845(4), 2897(10), 2962(9), 3055(9). Heating 10 g. Et_2SiH and 7.5 g. $\text{Me}_2\text{C}(\text{OH})\text{C}(\text{CH}_3)\text{SiEt}_2$ with 0.1 g. Pt-C in autoclave as above 18-20 hrs. at 210-20° gave a 1:1 mixt. of $\text{Me}_2\text{C}(\text{OH})\text{C}(\text{CH}_3)\text{SiEt}_2$, $\nu_{\text{as}}^{\text{KBr}}$ 108-10°, $\nu_{\text{cm}}^{\text{KBr}}$ 217-18°, 1,4622, 0,8628 [Raman spectrum, 228(4), 460(0), 542(3), 585(6), 638(1), 670(2), 726(2), 734(2), 772(5), 805(2), 912(0), 929(3), 975(4), 1010(4), 1022(3), 1100(1), 1235(5), 1318(6), 1410(2), 1430(4), 1466(6), 1620(8), 2816(2), 2880(10), 2910(8), 2960(5), 2970(8), 3055(2)]. ✓

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L.L. Shchukina, A.D. Gulyayev, Yu.S. Egorov
and 2-methyl-2-(triethylsilyl)-4-(1-triethylsilylvinyl)-1-cyclohexene, b_d 205.5-6°, 1.4954, 0.8871. The reaction run as above but at 160-70° gave only the former product. The alc. heated with KHSO₄ gave 100% 2-methyl-3-triethylsilyl-1,3-butadiene, b_d 91-1.5°, 1.4715, 0.8145; Raman spectrum 483(6), 585(6), 643(0), 725(1), 803(2), 832(3), 890(3), 973(5), 1018(8), 1118(0), 1240(3), 1313(10), 1380(4), 1417(4), 1470(4), 1571(8), 1623(20), 1660(3), 2881(9), 2909(6), 2955(6), 2995(3), 3080(6). This heated with (Me₂CO)₂ to 130° readily gave a polymeric oil with mol. wt. about 9000, while under polymerization at high pressure a rubber-like polymer was obtained. G. M. Kosolapoff

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Schenck, L.L.

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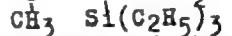
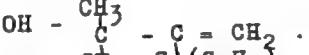
AUTHORS Petrov, A.D., Corresponding Member, AN USSR Shchukovskaya, L.L.,
 Sadykh-Zade, S.I., Yegorov, Yu.P.

TITLE The Synthesis and Dehydration of Unsaturated Silicon Containing
 Alcohols.

(Sintez i degidratatsiya nepredel'nykh kremniysoderzhashchikh spirov - Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 115, Nr 3, pp 522-525 (U.S.S.R.)

ABSTRACT It is known that the character of alcohol dehydration is determined by the structure and nature of its alcohol group. This is easiest in the case of the tertiary, which is followed by the secondary and most difficult it is in the case of the primary ones. In the case of silicon containing alcohol the influence of this element is added. It was shown that the alcohols with a β -position of the alcohol group with regard to Si suffer a stronger or slighter β -decay, the saturated as well as the unsaturated alcohols, independently of their structure, besides dehydration. The unsaturated alcohols with a β -position of the alcohol group as well as the not decomposing alcohols with a β -position of this group which are investigated in the present paper are studied only to a very small extent. Formulae of the first of such alcohols are given, the dehydration of which was not yet studied. The first unsaturated not decomposing alcohol with a β -position of the OH-group is



Its dehydration

Card 1/2 with KHSO_4 took place very easily and yielded the first silicium

The Synthesis and Dehydration of Unsaturated Silicon 20-3-28/59
Containing Alcohols.

analogue of the methylisopren. The authors then synthetized the cyclic analogues of this alcohol and of the silicon hydrocarbon. Already in 1953 it was proved that after an interaction between the dimethylacetylenylcarbinol and the surplus of the Grignard-reagent the obtained derivate reacts with R_3SiCl . The first of the two varieties (explained by schemes) was preferred. The synthesis of the above mentioned compound for $R=CH_3$ was repeated and a series of its analogues was obtained. All of them were easily dehydrated with $KHSO_4$. The precise results of the spectral analysis with the above mentioned results are the reason for the suggestion of a(given)reaction scheme. The formation of compounds of an enol-type are a second confirmation of the structure. The obtained values are similar to those of the vinylethynylsilanes $R_3SiC=C-CH_2$. Furthermore 2 ways of synthesis are described. The synthetization of the ether $CH_3/\overset{\text{C}}{\underset{\text{C}}{\text{C}}} CH$ was also successful. An isomeric tertiary alcohol $CH_3OSi(C_2H_5)_3$ which formerly was considered to be an ether has here given constants. There is 1 table and 4 Slavic references.

ASSOCIATION Institute for Organic Chemistry". N.D.Zelinskiy" of the A.N.of the
(Institut organicheskoy khimii im.N.D.Zelinskogo A.N. SSSR)

SUBMITTED March 3, 1957
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PETROV, A. D., SADYKH-ZADE, S. I., and SHCHUKOVSKAYA, L. L.

"Acetylene ~~x~~ und Dien-Silliciumorganische Verbindungen,"

paper presented for the Symposium on Organic and Non-Siliceous Silicon Chemistry
Dresden, 12-14 May 1958.

AUTHORS: Schmukovskaya, L. L., Petrov, A. D. S07/62-8-18/22

TITLE: The Synthesis of Silicon Containing Acetylene Alcohols
(Sintez kremneshashchikh atsetilensykh спиртов)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniya khimicheskikh nauk,
1958, № 8; pp. 101-104 (USSR)

ABSTRACT: Acetylene alcohols may be synthesized either by means of the condensation of the ketones with acetylene or by their interaction with the Grignard reagent (according to Iotsich), as is known. As is mentioned by the authors they produced ternary acetylene alcohol in their preliminary work (Ref 3). In the present paper they say, however, that after careful investigation it was found that in tetrahydrofuran the reaction $\text{HC}\equiv\text{CMgX} + \text{R}_3\text{SiX} \rightarrow \text{R}_3\text{SiC}\equiv\text{CH} + \text{MgX}_2$ takes place with a good yield of triethyl-silyl acetylene. Ternary silicon and fluorine containing unsaturated alcohol (1-propene-2-triethyl-silyl-3,3-methylfluoro-methyl-ol 3) were synthesized by the combination of triethyl silane with methyl-trifluoro-methyl acetylenyl carbonyl.

CARD 1 OF There are 1 table and 3 references, 1 of which is Soviet.

SOV/62-58-8-18/22

The Synthesis of Silicin Containing Acetylene Alcohols

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of the Chemistry of Silicates, AS USSR)

SUBMITTED: March 11, 1959

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B004/B066

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AUTHORS:

Mironov, V. F., Shchukovskaya, L. L.

TITLE:

Relative Reactivity of Some Alkenyl Silanes During Their Interaction With Trichloro Silane

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 4, pp. 760 - 762

TEXT: According to Refs. 1 - 3, hydrosilanes were added to vinyl and allyl silanes under conditions which required the performance of the reaction in an autoclave. The authors used the catalyst of I. L. Speier (Ref. 4) (0.1 N H₂PtCl₆.6H₂O in isopropanol). The reaction could thus be carried out at room temperature in a glass vessel. The relative reactivity was investigated by allowing equimolecular mixtures of allyl and vinyl silanes to react with an equivalent trichloro silane, and by determining the quantity of the reacting initial substance. The following was found: Vinyl trichloro silane reacted to 60%, allyl trichloro silane to 40% only; in the case of Cl₃SiCH=CH₂ and (C₂H₅)₂SiCH=CH₂,

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Relative Reactivity of Some Alkenyl Silanes
During Their Interaction With Trichloro
Silane

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B004/B066

the former compound reacted to 23%, the latter to 77%; in the case of $\text{Cl}_3\text{SiCH}_2\text{CH}=\text{CH}_2$ and $(\text{CH}_3)_3\text{SiCH}_2\text{CH}=\text{CH}_2$, the former compound reacted to 60%, the latter to 40%. The accumulation of chlorine atoms at the silicon atom thus facilitates the addition of trichloro silane to allyl-substituted silane and inhibits this reaction in vinyl-substituted silane. A table presents the ten compounds synthesized for the first time and their physical data, among them α , ω -disilyl ethanes which were obtained by addition of hydride silanes to various vinyl silanes and by alkylation by means of RMgX or ArMgX . The authors refer to papers by A. V. Topchiyev et al. (Ref. 2) and A. D. Petrov et al. (Ref. 6). There are 1 table and 6 references: 3 Soviet, 1 Japanese and 2 American.

ASSOCIATION: Institut organicheskoy khimii im. N. D. Zelinskogo Akademii nauk SSSR (Institute of Organic Chemistry imeni N. D. Zelinskogo of the Academy of Sciences, USSR), Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the Academy of Sciences, USSR)

SUBMITTED: August 19, 1959

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SOV/79-30-2-77/73

AUTHORS: Petrov, A. D., Shchukovskaya, L. L.

TITLE: Letters to the Editor. Synthesis of Unsaturated Silicon Hydrocarbons

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 2, p 700 (SSSR)

ABSTRACT: The reaction of chloroprene with methyldichlorosilane in an evacuated tube at 550-600° yields a mixture of isomers of silicon hydrocarbons, consisting mainly of silicoallene and corresponding dimers. This was confirmed by elemental analysis and infrared spectra.

ASSOCIATION: Institute of Chemistry of Silicates of the Academy of Sciences of the USSR (Institut khimii silikatov Akademii nauk SSSR)

SUBMITTED: November 30, 1959

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Synthesis and reactions of...

in the syntheses mentioned), as well as bialkyl diethynyl silanes of the type $R_2Si - (C\equiv CH)_2$. The medium used for the synthesis of nos. 1-4 and 12 (Table 1) was dry tetrahydrofuran, nos. 6-9 were produced in ether. The authors noticed the reduced value of the $C\equiv C$ vibration (at 2050 cm^{-1}) in the vibration spectra of monosubstituted silyl acetylenes which contained a triple bond in the α -position. According to their opinion, this effect is comparable to a similar reduction in vinyl silanes (Ref. 2). This effect is much less distinct in the spectra of di-substituted silyl acetylenes (Ref. 3). In the infrared spectrum of the acid $(C_2H_5)_3SiC\equiv COOH$, the stretching vibrations of the hydroxyl correspond to broad bands near 2630 and 2508 cm^{-1} . The position of these bands characterized the strength of the hydrogen bonds and justifies the statement saying that this acid is somewhat stronger than saturated aliphatic acids (but weaker than dibasic acids). This conclusion was confirmed by a comparison of the dissociation constants of triethyl silyl ethynyl carboxylic acid and acetic acid. The authors thank A. N. Lazarev for taking an interpreting the spectra. There are 1 table and 4 references: 3 Soviet-bloc.

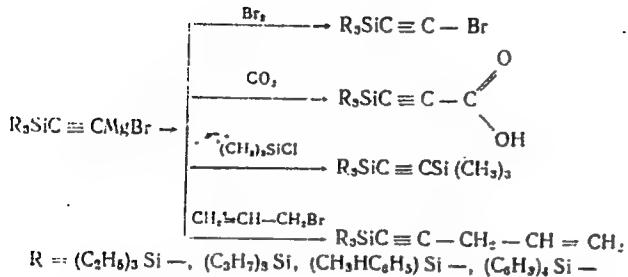
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Synthesis and reactions of...

SUBMITTED: November 28, 1960

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Synthesis and reactions of ...

Legend to Table 1: 1 - running number, 2 - synthesized compound, 3 - boiling point (no. 12 melting point), °C, 4 - pressure, mm Hg, 5 - n_{D}^{20} , 6 - d_{4}^{20} , 7-8 - MR_D, 7 - determined, 8 - calculated (according to Vogel),

9 - yield, %, (nos. 7 and 8 - referred to the reacted silicon hydrocarbon),

Column 1, no. 12: unlike trialkyl silyl acetylenes, this compound is readily hydrolyzable with water, even in the cold, and forms $(C_6H_5)_3SiOH$

with the melting point at 152-164°C.

Таблица 1

№ п.п.	Соединение	Т. кип., °C	Р. мм	n_{D}^{20}	d_{4}^{20}	MR _D		
						изд.	вычисл.	%
1	$(n-C_4H_9)SiC \equiv CH$	97-97,5	20	1.4376	0.7980	50,95	60,59	77
2	$CH_3(CH_2)CH_2SiC \equiv CH$	92,5	42	1.5159	0.9169	48,17	48,59	59
3	$C_2H_5(CH_2)CH_2SiC \equiv CH$	90	17	1.5161	0.9161	52,76	52,87	58,5
4	$(C_6H_5)_3Si(C \equiv CH)_2$	78-79	84	1.4393	0.8147	44,03	44,52	34
5	$(n-C_4H_9)_2Si(C \equiv CH)_2$	77,5-78,5	15	1.4429	0.8036	88,71	53,62	-
6	$(C_6H_5)_2SiC \equiv C-COOH$	132,2-132,8	3	1.4682	0.939	84,29	53,30	50
7	$(n-C_4H_9)_2SiC \equiv C-Br$	115,5-116	11	1.4740	1.0688	68,73	68,68	50**
8	$CH_3(CH_2)CH_2SiC \equiv C-CH_2-CH=CH_2$	120,5-120,7	13	1.5280	0.9253	61,97	62,17	61,5*
9	$CH_3(CH_2)CH_2SiC \equiv CSi(CH_3)_3$	129-129,5	27	1.5039	0.9968	72,12	72,27	55
10	$(CH_3)_2SiC \equiv C$	166	6	1.5579	0.9910	87,30	87,22	-
11	$(C_6H_5)_2SiC \equiv C$	172-174	3	1.5508	0.9732	96,53	96,88	-
12	$(C_6H_5)_2SiC \equiv CH$ **	т. пн. 48,5-49	1,5	-	-	-	-	-

Card 4/4

33988
S/062/62/000/002/013/013
B117/B138

5.2420
5.2410

AUTHORS: Shchukovskaya, L. L., Voronkov, M. G., and Pavlova, O. V.

TITLE: New method of N-dimethyl-B-difluoro borazene synthesis

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 2, 1962, 366

TEXT: The new method consists in the separation of hydrogen fluoride from N-dimethyl-B-trifluoro borazane heated with aluminum dust in vaseline oil medium. $C_2H_7NBF_3$ (boiling point 149 - 150°C (5 mm Hg), dry aluminum dust, and vaseline oil (boiling point 210 - 230°C (2 mm Hg)) were slowly heated in a distilling flask on Wood's alloy. At 278° hydrogen started separating energetically and the collecting vessel connected with the gasometer by way of a cooling trap rapidly filled with white brilliant N-dimethyl-B-difluoro borazane crystals. Owing to the vaseline oil the course of the reaction $6(CH_3)_2NH \cdot BF_3 + 2Al \rightarrow 6(CH_3)_2NBF_2 + 2AlF_3 + 3H_2$ was very smooth and easy to control. Yield of N-dimethyl-B-difluoro borazene: 85 - 88%. Some compounds of the type $R_2N \cdot BF_2$, which are still being examined, were obtained in a similar

✓

Card 1/2

New method of N-dimethyl-B-difluoro...

33988
S/062/62/000/002/013/013
B117/B138

manner. Hydrogen fluoride could not be separated from N-dimethyl-B-trifluoro borazane by heating with KF. There are 2 non-Soviet references. The two references to English-language publications read as follows:
J. F. Brown, J. Amer. Chem. Soc. 74, 1219 (1952); A. B. Burg, J. Banus, J. Amer. Chem. Soc. 76, 3903 (1954).

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the Academy of Sciences USSR) ✓

SUBMITTED: August 10, 1961

Card 2/2

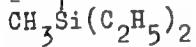
S/020/60/135/004/027/037
BC 16/B066

AUTHCRG: Shchukovskaya, L. L., Petrov, A. D., Corresponding Member
AS USSR, and Lazarev, A. N.

TITLE: High-temperature Condensation of Chloroprene With Methyl Silane Dichloride

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 4, pp. 883-885

TEXT: The authors studied the high-temperature condensation of chloroprene with methyl silane dichloride: 1) at 550-580°C and 2) at 590-600°C. Ad 1) Two principal fractions: I (Boiling point 68.5 - 70°C/18 mm Hg) and II (88 - 90°C/0.5 mm Hg) were obtained by fractionation after treatment with C₂H₅MgBr. In one of these fractions the expected methyl diethyl silyl butadiene CH₂=C—CH=CH₂ was found. It contains at least 50% of allene isomer



and up to 5% chlorine. Chlorine was also contained in the dimer fraction:
[CH₃(C₂H₅)₂Si—CH=CH—CH=CH₂]₂. Ad 2) Each of the 11 fractions obtained

Card 1/4

High-temperature Condensation of Chloroprene
With Methyl Silane Dichloride

S/020/60/135/004/027/037
BC18/BC66

was methylated and then fractionated. Only 5 fractions were studied:

Fraction	Boiling Point
A	111.5-113°C/748 mm Hg
B	71°/64 mm Hg
V	{ 75°/30 mm Hg 74°/28 mm Hg
G	86°/20 mm Hg
D	62-64°/2 mm Hg

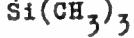
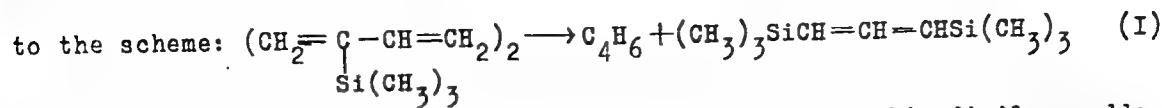
In this case the yield of condensate was higher: up to 50 %, calculated for the chloroprene reacted. The reaction product could be methylated by CH_3MgBr . In addition to $\text{CH}_2=\text{C}[\text{Si}(\text{CH}_3)_2]-\text{CH}=\text{CH}_2$ (isomer mixture) the authors

isolated and identified styrene (10 % yield). They regard the latter fact as proof for a partial reduction of the chlorine of chloroprene and also for a dehydrogenation, as the styrene is apparently formed via the vinyl cyclohexene. But styrene could also have resulted via butadiene. The authors further isolated a disilane to which they ascribed the empirical formula $\text{C}_{10}\text{H}_{22}\text{Si}_2$ and a presumable structure: $(\text{CH}_3)_3\text{SiCH}=\text{CH}-\text{CH}=\text{SHSi}(\text{CH}_3)_3$, which however, could not be confirmed. The disilane was probably formed according

Card 2/4

High-temperature Condensation of Chloroprene
With Methyl Silane Dichloride

S/020/60/135/004/027/037
B016/B066



But its spectrum is in contradiction with this formula. This disilane adds both 2 and 4 bromine atoms. The fraction D much resembled the α -trimethyl silyl vinyl cyclohexadiene (see the terminal member of the attached scheme II), it may be formed according to this scheme. R. I. Pal'chik took part in the experimental section of this paper. There are 2 Soviet references.

ASSOCIATION: Institut khimii silikatov Akademii nauk SSSR (Institute of Silicate Chemistry of the Academy of Sciences USSR)

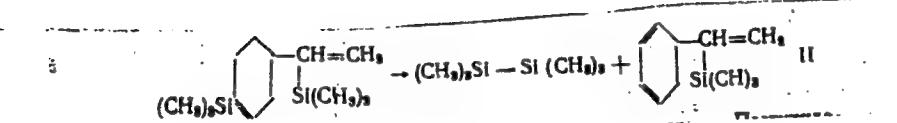
SUBMITTED: August 18, 1960

Card 3/4

"APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548920020-0

S/020/60/135/004/027/037
B016/B066



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Card 4/4

APPROVED FOR RELEASE: 08/23/2000

CIA-RDP86-00513R001548920020-0"

20639

53700 2209, 1164, 1273

S/020/61/136/006/015/024
B'03/B203

AUTHOR: Shchukovskaya, L. L., Pal'cnik, R. I., and Petrov A. D.,
Corresponding Member AS USSR

TITLE: Synthesis and reactions of acetylene silicon hydrocarbons

PERIODICAL: Doklady Akademii nauk SSSR, v. 156, no. 6, 1961, 1554-1556

TEXT: The authors continued their studies of the synthesis of acetylene silicon hydrocarbons (Ref. 1). From triethyl silyl acetylene ($C_2H_5)_3SiC \equiv CH$ they easily obtained the organomagnesium compound ($C_2H_5)_3Si \equiv CMgBr$ which can react with carbonyl compounds. In the present study, the authors proceeded according to the enclosed scheme. They synthesized alkyl- and alkyl-aryl-silyl monoacetylene hydrocarbons of the type — Si — C \equiv CH, further some derivatives of the type — Si — C \equiv C — X (where X = Br, COOH, and others), of the disubstituted monoacetylene hydrocarbons of the type — Si — C \equiv C — Si — (forming in small amounts

Card 1/4

SHCHUKOVSKAYA, L.L.; VORONKOV, M.G.; PAVLOVA, O.V.

New methods of synthesizing β -monohalo-substituted N-dialkylborazines and N-trialkylborazanes. Dokl. AN SSSR 143 no.4:
887-889 Ap '62. (MIRA 15:3)

1. Institut khimii silikatov AN SSSR. Predstavлено akademikom
A.V.Topchiyevym.
(Borazane) (Borazine)

SHCHUKOVSKAYA, L.L.; USHAKOV, S.N.; GALANINA, N.K.

Synthesis of halogenated acetalddehydes hydrates. Izv.AN SSSR.Otd.khim.
nauk.no.9:1692-1693 S '62. (MIRA 15:10)

1. Institut vysokomolekulyarnykh soyedinenij AN SSSR.
(Acetaldehyde)

SHCHUKOVSKAYA, L.L.; PAL'CHIK, R.I.

Synthesis of trimethylsiloxyacetylene. Izv. AN SSSR. Ser. khim.
no.8:1556 Ag '64. (MIRA 17:9)

1. Institut khimii silikatov im. I.V. Grebenschchikova AN SSSR.

L 25271-65 ENT(m)/EPP(c)/EWP(j)/T PC-4/Pr-4 RM

ACCESSION NR: AP5001602

S/0062/64/000/012/2228/2230

21
19
B

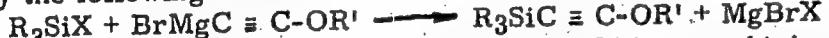
AUTHOR: Shchukovskaya, L. L.; Pal'chik, R. I.

TITLE: Synthesis of trialkylsilylalkoxyacetylenes and alpha-bromo-beta-trialkylsilylvinyl ethers

SOURCE: AN SSSR. Ozvestiya. Seriya khimicheskaya, no. 12, 1964, 2228-2230

TOPIC TAGS: trialkylsilylalkoxyacetylene, silylalkoxyacetylene derivative, alkylsilylvinyl ether, synthesis, acetylenic silane derivative

ABSTRACT: A new class of compounds, exemplified by trimethylsilylethoxyacetylene, trimethylsilylbutoxyacetylene and triethylsilylethoxyacetylene was synthesized by the following reaction under mild conditions:



The corresponding halovinyl ethers $R_3SiCh-CX-OR'$ were obtained by reaction of the above Grignard complex with 20% NH_4Cl solution. These -bromo- -trialkylsilylvinyl ethers were hydrolysed, by dropwise addition to ice water, to the cor-

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L 25271-65

ACCESSION NR: AP5001602

2

responding trialkylsilylacetates. Under the hydrolysis conditions $(\text{CH}_3)_3\text{SiCH}_2\text{COOC}_2\text{H}_5$ and $(\text{CH}_3)_3\text{SiCH}_2\text{COOC}_4\text{Hg}$ underwent rupture of the Si-C bond: $2(\text{CH}_3)_3\text{SiCH}_2\text{COOR}' \xrightarrow{2\text{HOH}} [(\text{CH}_3)_3\text{Si}]_2\text{O} + 2\text{CH}_3\text{COOR}'$. Physical properties and IR spectral data were obtained for the compounds. "Spectra were obtained and interpreted by A. N. Lazarov." Orig. art. has: 1 table and 3 equations.

ASSOCIATION: Institut khimii silikatov im. I. V. Grebenshchikova Akademii nauk SSSR (Institute of Silicate Chemistry Academy of Sciences SSSR)

SUBMITTED: 04May64

ENCL: 00

SUB CODE: OC, GC

NR REF SOV: 002

OTHER: 000

Card 2/2

SPICHKOVSKAYA, LILY, PH.D., RUDNICK, R.A.

Order of addition of trialkylstannanes to propargyl alcohol. 7thur.
obz. khim. 35 no.6:1132 Je '65. (MIRA 18:6)

1. Institut vysokomolekulyarnykh soyedineniy AN FSSR.

L 39437-65 EPF(c)/EPR/EWP(j)/EWT(m) Pe-4/Pr-4/Ps-4 RPL RM/WW

ACCESSION NR: AP5005894

S/0020/65/160/003/0621/0624

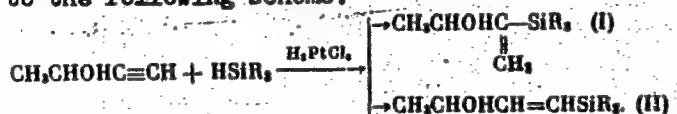
AUTHORS: Shchukovskaya, L. I.; Pal'chik, R. I.; Petrov, A. D. (Corresponding member AN SSSR) (Deceased)

TITLE: The order of adding trialkylsilanes to unsaturated alcohols

SOURCE: AN SSSR. Doklady, v. 160, no. 3, 1965, 621-624

TOPIC TAGS: silane, alcohol, IR spectrum

ABSTRACT: The authors have demonstrated that trialkylsilanes may be added to dimethylethynyl carbonyl and methyltrifluoromethylthiethynyl carbonyl in two directions according to the following scheme:



The IR spectra are given for the two pairs of alcohol isomers corresponding to these two directions. In each pair, both isomers are identified by bands of valence oscillations of CH in the groups C=CH₂ or CH-CH. In the latter case the band of CH≡CH at about 3000 cm⁻¹ proves to be on the slope of the bands of the

Card 1/2

L 39437-65

ACCESSION NR: AP5005894

groups CH_3 and C_2H_5 . The frequency of the bands of associated hydroxides (higher in the tertiary alcohols than in the secondary) is shifted toward the long waves in isomers containing the OH in the γ -position toward silicon. This shift is greater than in isomers with OH in the β -position. The position of C=C-oscillation in spectra of the isomers changes from 1620 - 1630 cm^{-1} for the groups $\text{CH}=\text{CH}$ to 1600 cm^{-1} in the groups $\text{C}=\text{CH}_2$. The structure of the adducts obtained was verified by reverse synthesis. The various syntheses and products are described briefly, with summaries of their IR spectra, properties, and dimensions. Orig. art. has: 2 figures.

ASSOCIATION: Institut khimii silikatov im. I. V. Grebenshchikova Akademii nauk SSSR (Institute of the Chemistry of Silicates Academy of Sciences SSSR)

SUBMITTED: 21May64

ENCL: 00

SUB CODE: OC

NO REF Sov: 004

OTHER: 001

Card 2/2

L 4288-66 EWT(m)/EPF(c)/EPF(j)/T RM

ACCESSION NR: AP5024004

UR/0020/65/164/002/0357/0360

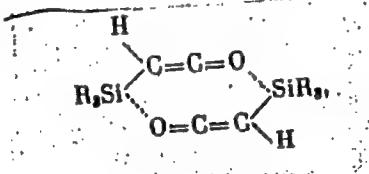
AUTHOR: Shchukovskaya, L. L., ^{44,55} Pal'chik, R. I., ^{44,55} Lazarev, A. N., ^{44,55}

TITLE: Synthesis and reactions of trimethylsilylketene/^{11,15} trimethylsiloxyacetylene

SOURCE: AN SSSR. Doklady, v. 164, no. 2, 1965, 357-360

TOPIC TAGS: organosilicon compound, chemical bonding, conjugate bond system

ABSTRACT: Trimethylsilylalkoxyacetylenes decompose at 120 - 130C to yield the corresponding olefin and trimethylsilylketene (CH_3)₃SiCH=C=O. The NMR and IR spectra of the product indicate that the ketene formed partially isomerizes into the corresponding acetylene, probably via an intermediate complex with a pentacovalent silicon, e. g.,

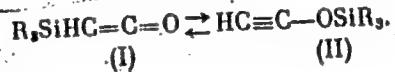


Card 1/4

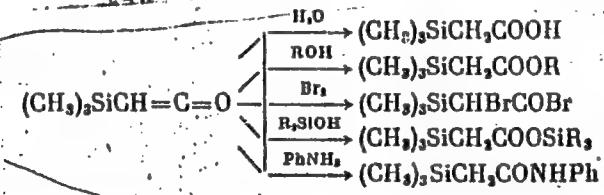
L-4208-56
ACCESSION NR: AP5024004

O

i.e., the following tautomeric equilibrium exists:



IR spectra of the equilibrium mixture $(\text{CH}_3)_3\text{SiCH=C=O} \rightleftharpoons (\text{CH}_3)_3\text{SiO-C}\equiv\text{CH}$ were recorded, and the conjugation of the Si-O and C≡C bonds was deduced (see Fig. 1 of the Enclosure). In the addition reactions studied, the compound reacted in the ketene form as follows:



Card 2/4

L 4288-66

ACCESSION NR: AP5024004

6

"The authors thank A. S. Khachaturov for taking the NMR spectra." Orig. art. has:
2 figures and 1 table.

ASSOCIATION: Institut khimii silikatov im. I. V. Grebeshchikova Akademii nauk SSSR
(Institute of Silicate Chemistry, Academy of Sciences, SSSR)

SUBMITTED: 16Feb65

ENCL: 01

SUB CODE: OC, GC

NO REF SOV: 005

OTHER: 004

Card 3/4

L 4283-66

ACCESSION NR: AP5024004

ENCLOSURE: 01

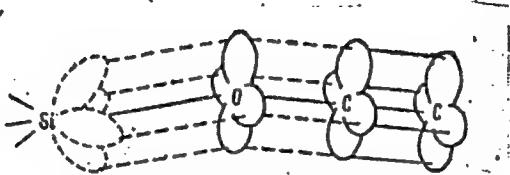


Figure 1. Conjugation of Si-O and C=C bonds (schematic representation).

Card 4/4 DP

U.S.S.R. Ministry of Chemical Industry, Moscow, Russia.

Letter of invitation of trialkylsilanes to unsaturated alcohols.
Moscow, RUSSIA 103 no. 3:1/1-74, Jan 1975.

(Urgent IPB)

1. Institut khimii silikatov im. I.V. Gubanskikhikova AN SSSR.
2. Tlen-kom spetsial'noe AN R.S.F.S.R. Petrozavodsk.

USSR / Human and Animal Physiology (Normal and Pathological).
General Problems.

T-1

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 59963

Author : Shchukuryan, K. G.; Tovmasyan, R. A.; Tarverdyan, A. N.
Inst : Republican Clinical Hospital of ArmSSR
Title : Several Data on the Effect of the Irritation of the
Vestibular Analysor Upon the Secretory Function of the
Stomach

Orig Pub : Sb. nauchn. tr. Resp. klinich. bol'nitsy ArmSSR, 1957,
1, 529-531

Abstract : After rotation in the Barany chair with a speed of 10
rev/20 sec., a parasympathetic effect appeared in 23
and 38 subjects (increase in the quantity of gastric
secretion and the content of total, free and bound HC1),
in 7 persons a sympathetic effect was observed (decrease
in secretion and acidity), and in the remaining ones
there was no reaction to the rotation. -- T. G. Beteleva

Card 1/1

KARPOV, A.A., inzh.; KUSTOBAYEV, G.G., inzh.; LAUSHKIN, N.P., inzh.;
LANGE, Z.I., inzh.; MOSYREVA, M.D., inzh.; SAVEL'YEV, G.V., inzh.;
SHCHULEPHIKOV, I.S., inzh.; Prinimali uchastiye: SYCHKOV, B.A., inzh.;
MILIKHIN, A.Ye., inzh.; ZAYTSEV, R.A., inzh.; ZARZHITSKIY, Yu.A.,
inzh.; LEONT'YEV, A.I., inzh.; VIKTOROVA, T.Ye., inzh.; SERIKOV, A.A.,
inzh.

Operation of recuperator soaking pits in the 1150 MMK rolling
mill. Stal' 22 no.8:753-758 Ag '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Furnaces, Heating) (Rolling mills)

S/CS1/S1/000/023/015/061
S117/B147

AUTHORS: Alimarin, I. P., Yakovlev, Yu. V., Shulepnikov, M. N.,
Peretrozhin, G. P.

TITLE: Determination of small amounts of impurities in thallium,
tallium, phosphorus, and antimony by the method of radio-
activation analysis

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 128, abstract
23D97 (Sb. "Radioakt. izotopy i yadern. izlucheniya v nar.
khim. SSSR. v. I". M., Gostoptekhizdat, 1961, 293 - 297)

TEXT: A comparison was made between the radiochemical and spectroscopic
variants of the activation analysis. General schemes of the radiochemical
separation of impurities in the determination of Cu, Zn, As, Au, and P in
tellurium and of Mn, Cu, Zn, Ga, As, P, and Cr in antimony, as well as the
main γ -spectra in the determination of Mn, Zn, Cu, Cs, and Sb in thallium
and of As, Mn, and Ga in phosphorus are presented. [Abstracter's note:
Complete translation] ✓

ALIMARIN, I.I.; YAKOVLEV, Yu.V.; SHCHULEPNIKOV, M.N.; VLASOV, D.A.;
CHERNOV, G.M.; SURKOV, Yu.A.

Radioactive determination of impurities in high purity
thallium. Zhur.anal.khim. 16 no.2:213-216 Mr-Apr '61.
(MIRA 14:5)
1. Vernadsky Institute of Geochemistry and Analytical Chemistry,
Academy of Sciences U.S.S.R., MOSCOW.
(Thallium—Analysis)

L 54980-65 EWT(m)/EWP(i)/EPF(c)/EWA(d)/EWP(t)/EWP(b) IJP(c) JD/JG/WB
ACCESSION NR: AP5007630 S/0365/65/001/001/0122/0123
620.197.2

25

22

B

AUTHOR: Tomashev, N. D.; Shchulepnikov, M. N.; Ivanov, Yu. M.

TITLE: Radiochemical study of the mechanism of the protective action of palladium
in corrosion-resistant titanium-palladium alloys

SOURCE: Zashchita metallov, v. 1, no. 1, 1965, 122-123

TOPIC TAGS: titanium alloy, palladium containing alloy, corrosion resistance,
neutron bombardment

ABSTRACT: An alloy of titanium with 0.1% palladium, prepared from TiO sponge
(0.08% Fe, 0.03% Si) was studied to determine whether treatment with HCl enriches
the surface of the sample with palladium. Annealed samples, half of which were
treated with boiling 5% HCl for 30 min, were exposed for 20 hr. to a flux of slow
neutrons ($1.3 \times 10^{13} \text{ cm}^{-2} \text{ sec}^{-1}$). The Pd¹⁰⁸ isotope was thus converted to the
radioisotope Pd¹⁰⁹. The samples and the controls (not subjected to the action of
HCl) were treated with aqua regia, Pd was precipitated with dimethylglyoxime, and
the precipitate was analyzed with a gamma spectrometer, which showed the presence

Card 1/2

L 54980-65
ACCESSION NR: AP5007630

3
of Pd¹⁰⁹. Thus, it was found that the treatment of the Ti-0.1% Pd alloy with HCl increased the amount of palladium at the surface of the sample by a factor of at least 75 relative to the untreated sample. An approximate calculation based on the assumption that palladium is present as a monolayer showed that about 20% of the surface of the sample becomes covered with palladium when treated with HCl. Orig. art. has: 1 figure.

ASSOCIATION: Institut fizicheskoy khimii, Akademiya nauk SSSR (Institute of Physical Chemistry, Academy of Sciences, SSSR); Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti (State Scientific Research and Planning Institute of the Rare Metal Industry)

SUBMITTED: 15Sep64

ENCL: 00 SUB CODE: MM

NO REF Sov: 005

OTHER: 000

Card 2/2

TOMASHOV, N.D.; SHCHULEPKOV, M.N.; IVANOV, Yu.M.

Investigating the mechanism of the protective action of palladium
in corrosion-resistant titanium-palladium alloys by the radio-
chemical method. Zashch.met. 1 no.1:122-123 Ja-F '65.

(MIRA 18:5)

1. Institut fizicheskoy khimii AN SSSR i Gosudarstvennyy nauchno-
issledovatel'skiy i proyektnyy institut redkometallicheskoy
promyshlennosti.

127-12-19/28

AUTHORS: Shchulepnikova, A.G. and Kuznetsov, S.N., Engineers

TITLE: Increase of Durability of Mining Machinery Parts by Hardening them in the Oxygen-Acetylene Flame (Povysheniye iznosostoykosti detaley gornogo oborudovaniya zakalkoy kislorodno-aksetilenovym plamenem)

PERIODICAL: Gornyy Zhurnal, 1957, No 12, pp 65-66 (USSR)

ABSTRACT: The gas-flame surface hardening method has been in use in the Magnitogorsk Mining Machinery Plant since 1951. The introduction of this method made it possible to increase considerably the number of machine parts subjected to hardening. Acetylene is generated by a 10 m³/hour generator of the "TPK 10-48" type. Oxygen is supplied from gas cylinders. The microstructure of the hardened layer is martensite or troostite with martensite; its hardness is 50 to 60 Rc. The annealing of small-size parts can be performed in the annealing furnaces at 180 to 200° C. The hardness after hardening and annealing is 45 to 55 Rc.

Card 1/2 The article contains 2 figures and 1 table.

ZAMORUYEV, G.M. [deceased], prof., doktor tekhn. nauk; SHUL'EPNIKOVA, A.G.,
assistant

Changes in surface layers of steel caused by abrasive wear. Izv.
vys.ucheb.zav.; mashinostr. no.7:45-50 '59. (MIRA 13:6)

1. Magnitogorskiy gorno-metallurgicheskiy institut.
(Mechanical wear) (Steel--Metallography)

SHULEPNIKOV, A.G.; YUDIN, I.K.

Resistance of deposited metal to abrasive wear. Izv. vus. uchet.
zav.; chern. met. 4 no.8:120-124 '61. (MIR 14:9)

1. Magnitogorskiy gorno-metallurgicheskiy institut.
(Hard facing) (Mechanical wear)

SHCHULEPNIKOVA, A.G.

Effect of iron ore and sinter on the abrasive wear of deposited metal. Avtom. svar. 15 no.1:20-22 Ja '62. (MIRA 14:12)

1. Magnitogorskiy gornometallurgicheskiy institut imeni G.I. Nosova.

(Hard facing)
(Mechanical wear)

SHCHULEPNIKOVA, A.G., inzh.

Abrasive wear and the microstructure of steel. Metalloved. i term.
obr. met. no.10:5-8 0 '62. (MIRA 15:10)

1. Magnitogorskiy gornometallurgicheskiy institut.
(Steel—Metallography) (Mechanical wear)

SHCHULEPKOVA, A.G.; IVANTSOV, G.I.

Resistance to abrasive wear of alloyed austenite and of a ferrite-carbide mixture of equal hardness prepared from it. Metalloved. i term. obr. met. no. 7:43-44 Jl '64. (MIRA 17:11)

1. Magnitogorskiy gorno-metallurgicheskiy institut.

SHCHUKIN AND KOVYAZIN, A.G.

Effect of composition, structure and changes in the surface layers
of steel on their resistance to wear by iron ore and sinter.
Transl. from Russ. v. mash. no. 19:17-28 '64. (MIRA 18:3)

SHC HUL'GA, Yu. D.
25858

Antianemich-eskoye Deystviye 6-Metiluratsila. /Eksperim. Issledovaniye/.
Vracheb. Delo, 1948, No 6, STB. 471-74

SO: LETOPIS NO. 30, 1948

PETROV, A.D.; SHCHULKOVSKAYA, L.L.

Synthesis and properties of symmetric acetylenic disilanes. Doklady Akad.
Nauk S.S.R. 86, 551-3 '52. (MLRA 5:9)
(CA 47 no.22:12225 '53)

SHCHUL'TS, G. E. and SHCHEGLOVA, V. F.

Shchul'ts, G. E. and Shcheglova, V. F.: "On the matter of the dropping of the ovaries in long-staple cotton", Ssoobshch. Tadzh., filiala Akad. nauk SSSR, Issue 10, 1949, p. 34-37, - Bibliog: 7 items.

SC: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 10, 1949).

INCPRTA : EDTCA Sec 6 Vol 13/0 Internal Med Sect 50

5314. THE USE OF 'DIOKHIN' IN THE TREATMENT OF PEPTIC ULCERATION
(Russian text) - Shechulutko I. B., Tolmach D. V. and Shklov-

skaya E. N. - VRACH. DELO 1957, 9 (897-900)

A series of 25 cases of gastric and duodenal ulceration treated with 'diokhin' (a Soviet ganglion-blocking agent) is described. Its effects include blockage of impulse transmission in the ganglia of the vegetative nervous system and inhibition of vascular and smooth muscle spasms of various organs. The dose used was 0.1 g. 3 times a day. 1 hour after meals for 20-25 days. Improvement was apparent within the first few days, with diminished pain, diminished dyspeptic symptoms, improved appetite and sleep. Roentgenologically the ulcer crater disappeared in 10 and greatly diminished in size in 8 patients. The drug had no effect on gastric secretory activity, while normalization of gastric motility was observed. (S)

BOGOLYUBSKIY, V.A.; SHCHUMELYAK, G.P.; GRECHKO, L.V.; VILENSKIY, Yu.B.

Investigating the non-diffusing reducing agents for multilayer
color films. Usp. nauch. fot. 8:61-66 '62. (MIRA 17:7)

SHCHUMOV, G.; TIKHONOV, M.

Supply grain-cleaning machines with a set of spare screens. Muk.-elev.
prom. 22 no.3:28 Mr '56. (MLRA 9:7)

1.Krasnoyarskaya kontora Zagotserno.
(Grain--Cleaning)

SHCHUMOV, N.

4393. SHCHUMOV, N. -- kratkosrochnye kreditovaniye promyshlennogo predpriyatiya.
M., gosfinizdat, 1954. 123 s. 17 sm. (V pomoshch' khozyaystvennomu aktivu
predpriyatiy). 15.000 ekz. 2r. 30k. -- (55-382)p
332.742.1

SU: Knizhnaya Letopsis', Vol. 1, 1955

SHCHUNAYEV, M. V.

SHCHUNAYEV, M. V.

Formerarbeiten. Von N. N. Barbashkin Und M. V. Shchunayev. Leipzig, Fachbuchverlag,
1953.

118 p. Illus., Diagrs., Tables.
Translation from the Russian, "Formouochnyye Raboty," Moscow, 1948.

N/5
741.42
.B2

YEPIFANOVA, A.P.; NESMEYENOV, A.N., akademik, glavnnyy red.; TOPCHIYEV, A.V., akad.,
zamestitel' glavnogo red.; ISAKOVA, O.V., otvetstvennyy red.;
LIKHTENSHEYN, Ye.S., otvetstvennyy red.; SHCHUNKOV, V.I.,
otvetstvennyy red.; POLESITSKAYA, S.M., tekhn.red.

Vasilii Vasil'evich Zvonkov. Vstop.stat'ia V.P.Mironova. Bibliografiia
sost. A.P.Epifanovoi. Moskva, 1957. 40 p. (Materialy k biobibliografii
uchenykh SSSR. Seriya tekhnicheskikh nauk. Transport, no.4)
(MIRA 10:12)

1. Akademiya nauk SSSR.

(Zvonkov, Vasilii Vasil'evich, 1891-)

SHCHUPAK A.D.
ARTEM'YEV, Yu.N., kandidat tekhnicheskikh nauk; ALEKSEYEV, I.A., inzhener;
ASTVATSATUROV, G.G., inzhener; BISNOVATYY, S.I., inzhener; BONDAREN-
KO, A.F., inzhener; GURAL'NIK, Ye.L., inzhener; GORBUNOV, M.F., inzhe-
ner; ZLATKOVSKIY, A.P., kandidat tekhnicheskikh nauk; KATTS, N.V., in-
zhener, KITAYEV, A.S., inzhener; KOZLOV, A.M., inzhener; LEONOV, P.T.,
inzhener; LIVSHITS, L.G., kandidat tekhnicheskikh nauk; LIBERMAN, A.R.,
inzhener; LINNIK, Ye.M., inzhener; LUKANOV, M.A., inzhener; MOROZOV,
S.A., inzhener; POGORELYY, I.P., kandidat tekhnicheskikh nauk; PETROV,
S.A., kandidat tekhnicheskikh nauk; PYATETSKIY, B.G., inzhener; RABO-
CHIY, L.G., kandidat tekhnicheskikh nauk; SELIVANOV, A.I., kandidat
tekhnicheskikh nauk; FERBERG, B.S., kandidat tekhnicheskikh nauk;
CHISTYAKOV, V.D., inzhener; CHUNIKHIN, V.M., inzhener; SHIRYAYEV, A.I.,
inzhener; SHCHUPAK, A.D., inzhener; KUCHUMOV, P.S., inzhener, redaktor;
PETROV, S.I.; PESTRYAKOV, A.I., redaktor; BAILOD, A.I., tekhnicheskiy
redaktor.

[Handbook of equipment for repairing tractors and agricultural machine-
ry] Spravochnik po oborudovaniiu dlia remonta traktorov i sel'skokho-
ziaistvennykh mashin. Moskva, Gos. izd-vo selkhoz. lit-ry, 1954. 646 p.
(MLR 7:11)

(Tractors--Repairing) (Agricultural machinery--Maintenance and
repair)

POLYAK, A.Ya., inzh.; SHCHUPAK, A.D., inzh.

Increasing performance speeds of wheeled tractors. Mekh. i elek.
sots.sel'khoz. no.4:4-11 '57. (MIRA 12:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii
sel'skogo khozyaystva.
(Tractors)

POLYAK, A.Ya., inzh.; SOLOVEYCHIK, A.G., inzh.; SHCHUPAK, A.D.

First results. Mekh. i elek. sots sel'khoz. 16 no.3;18-20 '58.
(MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhnizatsii
sel'skogo khozyaystva.
(Tractors)

BOLTINSKIY, V.N., akademik; GENIKHovich, M.I.; KOGAN, Ye.A.; NIKIFOROV, P.Ye.
PLISHKIN, A.A.; POLYAK, A.Ya.; SOLOVEYCHIK, A.G.; FILIPPOV, A.I.;
SHCHUPAK, A.D.; YAKOBI, M.A.

Performance of machine-tractor units at increased speeds. Mekh.
i elek.sots.sel'khoz. 17 no.3:1-19 '59. (MIRA 12:8)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk im.
Lenina (for Boltinskiy).
(Agricultural machinery)

POLYAK, A.Ya., inzh.; SHCHUPAK, A.D.

Study of the dynamic indices of a wheel-type tractor of the
1,4 ton class operating at increased speeds in excess of 9 km./
hour. Mekh.i elek.sots.sel'khoz. 20 no.4:18-21 '62.
(MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii
sel'skogo khozyaystva.
(Tractors)

POLYAK, Aleksandr Yakovlevich; SHCUPAK, Ayzik Davydovich;
KOSOROTOV, B.V., red.; SOKOLOVA, N.N., tekhn. red.;
OKOLELOVA, Z.P., tekhn. red.

[Operation of tractor-drawn machinery units at increased
speeds] Ekspluatatsiia mashinno-traktornykh agregatov na
povyshennykh skorostakh. Moskva, Sel'khozizdat, 1963.
(MIRA 17:4)
286 p.

SHCHUPAK, B.N.

Diurnal fluctuations of body temperature in man during the polar day. Fiziol.zhur. [Ukr.], 1 no.2:47-54 Mr-ap '55. (MIRA 9:9)

l. Kiiv's'kiy medichniy institut imeni akademika O.O.Bogomol'tsaya,
Kafedra normal'noi fiziologii.
(BODY TEMPERATURE) (CONDITIONED RESPONSE)

USSR/Medicine - History

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Author : Shchupak, B. N. (Kamchatskaya Oblast)
Title : Medical aid in the days of heroic defense of Petropavlovsk (Kamchatka)
(Centennial)
Periodical : Sov, zdrav., 3, 47-52, May-June, 1955
Abstract : Review of the 1850-1855 events, including French-English-American intervention. Underlines medical care and facilities, heroism of medical personnel during the period.
Institution : —
Submitted : November 18, 1954

KESEL', Ya.V., mayor meditsinskoy sluzhby; SHCHUPAK, B.N., starshiy
leytenant meditsinskoy sluzhby

Our practice in the improvement of the work of medical centers in
units. Voen.-med. zhur. no.10:72-74 O '55. (MLRA 9:10)
(MEDICINE, MILITARY)